Sandy City Public Utilities

2014 Water Quality Report

Mission Statement

Sandy PUBLIC UTILITIES

Proudly working together to provide quality utility services to our customers.

EFFECTIVENESS RESPONSIVENESS

INTEGRITY SAFETY

TEAMWORK

PEPPERWOOD TANK

Capacity - 3 Million Gallons

MESSAGE

IMPORTANT FACTS ABOUT YOUR DRINKING WATER

Several sources supply our drinking water in Sandy and they include: treated surface water from Metropolitan Water District of Salt Lake and Sandy, which is taken from Little Cottonwood Creek and Deer Creek Reservoir. Eighteen City wells that pump groundwater from underground aquifers located several hundred feet below the earth's surface. These wells are generally only operated during the summer months. For more information, contact Mike Campbell at (801) 352-4400.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791

Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Sandy City is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Who can help to conserve our water? You can. It takes all of us making an effort to make conservation of our water possible.

What you can do to conserve our water:

Go to these places to learn more about water:

Visit our website for indoor and outdoor water conservation tips at: www.Sandy.utah.gov/segolilygardens

Visit Sego Lily Gardens—1472 E Sego Lily Drive. This is Sandy City's Water Conservation Demonstration Garden that is FREE to the public. You can see ways to use water wise plants and irrigation systems for a beautiful waterwise landscape and learn from our staff.

Get a free water audit of your landscape:
Call 1-877-SAVE-H2O for a free audit of your sprinkler system with suggestions for needed adjustments.

When should you start?
Now! It's never too late.

How are Our Annual Water Quality Reports/Consumer Confidence Reports Distributed?

In an effort to be more cost effective and efficient, Sandy City's Annual Water Quality Report will be distributed electronically via the web starting June 2015. You can view this report now and in the future at**: sandy.utah.gov/waterqualityreport**

This report will not be mailed to your home unless you contact us with your name and full mailing address. This can be done by contacting our Public Utilities Department at (801) 352-4400.

Visit sandy.utah.gov/stormwater for more information and ways that you can help protect our waters. **We All Live Downstream.**

Surface & Ground Water Quality Report

Inadequately treated water (surface water) may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Contaminant	EPA MCL	MCLG	Year	Units	Range	Most Likely Source
Primary Inorganics						
Antimony	6 ug/L	6 ug/L	2012	ug/L	<3.0	Erosion of naturally occurring deposits
Arsenic	10 ug/L	N/A	2012	ug/L	0.5-0.9	Erosion of naturally occurring deposits; Runoff from orchards; runoff from glass and electronic waste.
Barium	2000 ug/L	2000 ug/L	2012	ug/L	79-429	Erosion of naturally occurring deposits
Beryllium	4 ug/L	4 ug/L	2012	ug/L	<1.0	Discharge from metal refineries, electrical, industries
Cadmium	5 ug/L	5 ug/L	2012	ug/L	<1.0	Corrosion of galvanized pipes, Erosion of natural deposits
Chromium	100 ug/L	100 ug/L	2012	ug/L	<2.0-7.7	Erosion of naturally occurring deposits
Cyanide (as free Cyanide)	200 ug/L	200 ug/L	2012	ug/L	<0.01	Erosion of naturally occurring deposits
Fluoride	4.0 mg/L	4.0 mg/L	2014	mg/L	0.536-0.9	Erosion of naturally occurring deposits and additional to meet Salt Lake Valley Health Regulations
Mercury	2 ug/L	2 ug/L	2014	ug/L	<0.2	Erosion of naturally occurring deposits
Nitrate	10 mg/L	10 mg/L	2012	mg/L	0.05-3.8	Runoff from fertilizer, leaching from septic tanks, sewage and naturally eroding deposits.
Nitrite	1 mg/L	1 mg/L	12/14	mg/L	<0.03	Runoff from fertilizer, leaching from septic tanks, sewage and naturally eroding deposits.
Selenium	50 ug/L	50 ug/L	2012	ug/L	0.7-2	Erosion of naturally occurring deposits
Sodium	NE	NE	2012	mg/L	12.7-23.6	Erosion of naturally occurring deposits
Sulfate	1000 mg/L	NE	2014	mg/L	10.0-55.0	Erosion of naturally occurring deposits
Thallium	2 ug/L	0.5 ug/L	2012	ug/L	<1.0	Leaching from ore processing sites and discharges from electronics, glass and factories.
Total Dissolved Solids	2000 mg/L	NE	2014	mg/L	120-1310	Soil runoff
Turbidity (Surface Water)	0.5 NTU	TT	2014	TT	0.017-0.070	Soil runoff, MCL 0.5 NTU for surface water
(Ground Water)	5.0 NTU	TT	2014	TT	.02-0.4	5.0 for Ground Water
Lead & Copper						
Lead	AL= 15	NE	2013	ug/L	0.7-6.4	Corrosion of household plumbing system
Copper	AL=1300	NE	2013	ug/L	29.4-961	Corrosion of household plumbing system
Secondary Inorganic						
Chloride	250 mg/L	NE	2014	mg/L	22.6-66.3	Erosion of naturally occurring deposits. Road de-icing
PH	6.5-8.5	NE	2014	Unites	7.88-8.31	Naturally occurring
Radioactive Contaminants						
Gross Alpha	15 pCi/L	NE	2014	pCi/L	2.7-9.7	Erosion of natural deposits
Gross Beta	50pCi/L	NE	2014	pCi/L	2.7-14.0	Decay of natural and man-made deposits
Radium 228	NE	NE	2014	pCi/L	0.13-2.2	Decay of natural and man-made deposits
Radium 226	NE	NE	2014	pCi/L	0.15-0.55	Decay of natural and man-made deposits
Uranium	30 ug/L	NE	2014	ug/L	4.5-15.7	Erosion of natural deposits

EPA requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table above are the only contaminants detected in your drinking water.

Contaminant	EPA MCL	MCLG	Year	Units	Range	Most Likely Source
Pesticides & Herbicides						
All Parameters	Various	Various	2014	ug/L	ND	Various sources
Volatile Organic Chem.						
Tetrachloroethylene	0.005 mg/L	0 mg/L	2013	mg/L	0.001	Improper disposal of dry cleaning and other solvents
Disinfection By-Produces						
TTHM	80 ug/L	NE	2014	ug/L	7.2-41.8	By-product of drinking water chlorination
HAA5s	60 ug/l	NE	2014	ug/L	1.3-41.6	Treatment disinfection
HAA6	60 ug/L	NE	2014	ug/L	6.8-44.9	Treatment disinfection
Biological Contaminants						
Total Coliform	>5%	0	2014	NA	0%	MCL for monthly compliance. No violations were issued. Human & animal fecal waste, naturally occurring in environment.
Regulated Organics						
Bromodichloromethane	NE	NE	2012	ug/L	6.1	By-product of drinking water chlorination
Chlorodibromomethane	NE	NE	2012	ug/L	2.1	By-product of drinking water chlorination
Chloroform	NE	NE	2012	ug/L	0.7-13.3	By-product of drinking water chlorination
Organic Material						
TOC	UR	NE	2012	mg/L	0.58-2.64	Naturally occurring
DOC	UR	NE	2012	mg/L	1.96-2.54	Naturally occurring
UV-254	UR	NE	2012	cm-1	0.006-0.03	Naturally occurring

In the upper tables you will find many terms and abbreviations you might not be familiar with. To help you better these terms we've provided the following definitions:

DEFINITIONS FOR TABLE OF CONTAMINANTS:

ND – Non-detects-Laboratory analysis indicates that the constituent is not present.

mg/L - Milligrams per liter or parts per million (ppm) – one part per million corresponds to one minute in two (2) years, or a single penny in $10,000.

ug/L -Micrograms per liter or parts per billion (ppb) – one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

PPT – Parts per trillion or nanograms per liter (nanograms/l) – one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

pCi/L – picocuries per liter – picocuries per liter is a measure of the radioactivity in water.

NTU – Nephelometric Turbidity Unit – Nephelometric Turbidity Unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

AL – Action Level – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

TT – Treatment Technique – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

MCL – Maximum Contaminant Level – The highest level of contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

MCLG – Maximum Contaminant Level Goal – The level of a contaminant in drinking water below which there is not known or expected risk to health. MCLG's allow for a margin of safety.

NE – Not established.
UR – Unregulated.

Range – Range of measurements based on testing of Sandy City sources.

(a) The MCL for beta particles is 4 mrem (millirems) per year. EPA level of concern for beta particles
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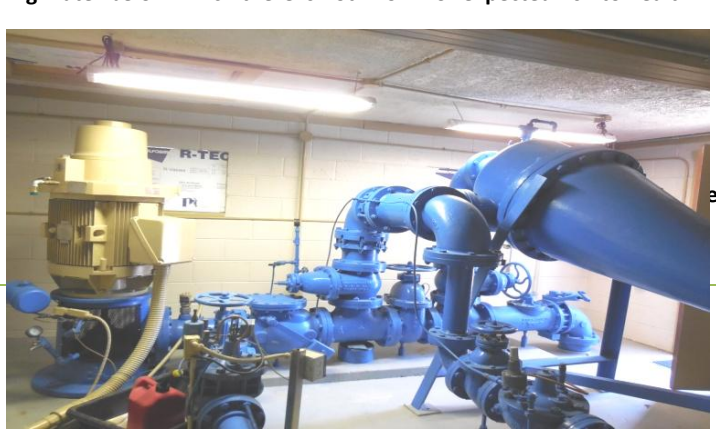

Sandy's Oldest Well
Robinson Well – Drilled 1961

Back Flow Prevention

Cross Connection Control and Backflow Prevention

Sandy City Public Utilities is committed to providing our customers with a clean, safe supply of drinking water and protecting its quality. Our goal is to help protect our valuable drinking water resources by providing public awareness and education to you and our drinking water customers on how to prevent contamination and pollution through unprotected cross connections to our important and necessary drinking water supply.

*What **is** a Cross Connection?*

A cross-connection is any temporary or permanent connection between a public water system and **anything else**, such as any source or system containing nonpotable water, gases, liquids or other substances.

What is Backflow?

Backflow is the undesirable reversal of flow of water or nonpotable water or gases, liquids and other substances through a cross-connection and into the piping of a public water system or consumer's potable water system. Backflow is caused by two types of conditions. One condition is called backpressure, where the pressure on the customers side becomes higher than the water systems water pressure and may force the water to reverse direction. Another condition, backsiphonage, occurs when there is a drop in the supply pressure of the water system, due to a water line break or fighting a fire. This creates a vacuum which may pull or siphon the contaminants or pollutants back into the drinking water supply.

Backflow Prevention

All facilities, commercial or residential, do have at least one potential or actual cross connection. Cross connections are allowed, provided they have proper protection against backflow. The customer's responsibility is to protect cross connections against backflow by installing and maintaining backflow prevention devices and assemblies. These devices and assemblies insure that the water flows in one direction, and doesn't allow for pollutants or contaminants to flow back into the drinking water supply.

Sample Taps

In accordance with the Safe Drinking Water Act, Sandy City takes 100 bacterial samples each month from different locations thru out the city. We draw our samples from residents outside taps, wells and currently have 59 stand alone sample taps (pictured).